ABSTRACT OF THE DISCLOSURE

A method for I/Q imbalance calibration of an OFDM system comprising the steps of initializing parameters A_p, B_p and γ_p, estimating a loop delay factor L, generating a discrete-time test signal $x[n]$, deriving a signal $x_{com}[n]$ by compensating the test signal $x[n]$ according to a function with parameters A_p, B_p and γ_p, converting the signal $x_{com}[n]$ to an analog signal $x(t)$, applying I/Q modulation to the signal $x(t)$ and outputting a modulated signal $x_{mod}(t)$, obtaining a characteristic signal $x_c(t)$ of the modulated signal, obtaining a signal $x_s[n]$ by sampling the characteristic signal $x_c(t)$ and obtaining statistics U_1 and U_2 of the signal $x_s[n]$, and updating the parameters A_p, B_p and γ_p respectively by functions of L, U_1, U_2, and the current values of A_p, B_p and γ_p.